CLAIM AMENDMENTS

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1. *(Currently amended)* A method for producing a population of genetically altered human embryonic stem (hES) cells, comprising:

   a) obtaining a population of hES cells essentially free of feeder cells ~~and maintained on an extracellular matrix~~; and

   b) transfecting the cells with a polynucleotide while being cultured ~~in the culture environment~~ on an extracellular matrix in a medium conditioned by fibroblast feeder cells, wherein the polynucleotide comprises a protein encoding region operably linked to a promoter that promotes transcription of the encoding region while the cells are undifferentiated,

   thereby producing genetically altered hES cells that express the protein while undifferentiated.

2. *(Original)* The method of claim 1, further comprising preferentially selecting cells that have been genetically altered with the polynucleotide.

3. *(Previously presented)* The method of claim 1, wherein the human embryonic stem cells are maintained in an environment comprising extracellular matrix components and a conditioned medium produced by collecting medium from a culture of feeder cells.

4 & 5. *CANCELLED*

6. *(Previously presented)* The method of claim 1, wherein the polynucleotide is selected from an adenoviral vector, a retroviral vector, and a DNA plasmid complexed with positively charged lipid.

7. *CANCELLED*

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